

Thus the question of orchard heating became economic. Many fruit growers who believed in the operation in general were unable to raise money to buy fuel; while others found that heating did not pay under the conditions then existing in the valley. Thus, even before the World War many former "smudgers" had moved away or were compelled by force of circumstances to join the "slackers" referred to by Mr. Hamrick.

"Smudging" passed through two sudden declines; one immediately following 1911, the other due to effects of the war upon supply and prices of labor and fuel.

The above conditions were reported from time to time. Curtailment of the fruit-frost service was not recom-

mended, however, because all of the substations were cooperative and their reports were gathered by telephone without additional expense. Valuable climatic data and experience, were secured by continuing the service intact. It is believed that all data and charts should be preserved for possible future use. All of the stations were found useful in connection with general crop reports and frost work, in both fall and spring.

It would seem that my article in SUPPLEMENT No. 16, MONTHLY WEATHER REVIEW, pages 38 to 45, should be mentioned in connection with description of charts and forecasting methods at Grand Junction.

551.573 (a8) (73) RESULTS OF EVAPORATION OBSERVATIONS.

[Submitted by Robert E. Horton, Voorheesville, N.Y., Oct. 12, 1921.]

These records were established and maintained by the Bureau of Plant Industry of the United States Department of Agriculture. Through an agreement between the officials having charge of these records and the Chief of the United States Weather Bureau, they have been compiled by Robert E. Horton in the form in which they are here presented.

The accompanying Table 1 shows the locations of the stations, their approximate latitudes and elevations, periods covered by the records, which were generally kept from April to September of each year, and also diameters of the evaporation pans.

Initially, some of the pans were 8 feet in diameter, while others were 6 feet in diameter. In most instances the larger pans were changed to 6 feet diameter at the end of the first year. The dates of change, if any, are shown in columns (5) and (6) of Table 1.

The pans were galvanized iron, 24 inches deep, buried 20 inches in the soil and kept filled with water to soil surface level or 4 inches below rim of pan. While there appears to have been some variations, yet the intention and the general rule was to maintain anemometer cups 24 inches above rim of pan. Mean air temperatures were obtained by taking the average of maximum and minimum thermometers in standard shelters, the thermometers being about 4 feet above ground.

Humidity was obtained by means of sling psychrometers.

The instructions required that grass should be kept cut and other obstructions removed from the vicinity of the pans so as to permit free wind movement close to the water surface. At many stations records of water-surface temperature were kept. The mean was obtained by averaging the daily readings of maximum and minimum thermometers. The thermometer tube was removed from the metallic backing and the glass stem slipped through a cork sufficiently so as to float the thermometer with its bulb about one-fourth inch below water surface. In the accompanying tables, mean air temperature is designated θ_a ; mean water-surface temperature, θ_w ; wind velocity, in miles per hour, w ; vapor pressure, in inches of mercury, v ; observed evaporation, in inches per month, E_o . In order to afford a basis of comparing the measured evaporation with the causal factors, a few interpolations of some of these elements have been made. Interpolated figures are inclosed in parentheses. There have been no interpolations of evaporation amounts.

TABLE 1.—United States Bureau of Plant Industry evaporation records.

	Station.	Record years used.	Latitude (approximate).	Elevation above sea level	Diameter of pan	
					8-foot beginning—	8-foot beginning—
1	Aerdeen, Idaho.....	1913-19	42 40	4,400		1913
2	Akron, Colo.....	1909-20	40 40	4,650	1909	1916
3	Amarillo, Tex.....	1918-19	35 20	3,876		1910
4	Archer, Wyo.....	1914-20	41 00	8,012		1914
5	Ardmore, S. Dak.....	1913-20	43 20	3,557		1913
6	Biggs, Calif.....	1916-19	39 00	94		1916
7	Big Springs, Tex.....	1916-20	32 00	2,396		1916
8	Burns, ' reg.....	1914-19	43 40	4,125		1914
9	Chillicothe, Tex.....	1913-19	34 20	1,406		1913
10	Colby, Kans.....	1915-20	39 30	3,135		1915
11	Crowley, La.....	1910-19	30 15	21		1910
12	Dalhart, Tex.....	1908-20	36 20	4,000	1908	1917
13	Dickinson, N. Dak.....	1909-20	47 00	2,543	1909	1917
14	Edgely, N. Dak.....	1908-20	46 20	1,468	1908	1917
15	Garden City, Kans.....	1908-20	38 00	2,838	1908	1917
16	Havre, Mont.....	1916-20	48 40	2,505		1916
17	Hays, Kans.....	1907-20	39 00	2,000	1908	1917
18	Hettinger, N. Dak.....	1911-20	46 00	2,253		1911
19	Lawton, ' kia.....	1916-20	34 35	1,111		1916
20	Mandan, N. Dak.....	1914-20	47 00	1,750		1914
21	Moccasin, Mont.....	1909-20	47 15	4,228		1910
22	Moro, ' reg.....	1911-19	45 40	1,800		1911
23	Nephi, Utah.....	1908-19	39 45	6,000	1908	(Pan-4 inches'
24	North Platte, Nebr.....	1907-20	41 20	2,841	1908	1915
25	Sheridan, Wyo.....	1917-20	44 40	3,790		1917
26	Tucumcari, N. Mex.....	1913-20	35 30	4,194		1913
27	Williston, N. Dak.....	1909-16	48 00	1,875	1910	.....
		1918				
28	Woodward, Okla.....	1914-20	36 30	1,900		1914

TABLE 2.

Month and year.	θ_a .	θ_w .	w .	v .	E_o .
Aberdeen, Idaho.					
1912.					
June.....	63	64	8.4		11.737
July.....	66	67	7.3		12.882
August.....	63	61	7.0		7.255
September.....	57	(57)	7.9		5.337
Year.....					
1913.					
April.....	46		7.4		5.396
May.....	55	56	7.4		6.926
June.....	61	64	5.2		6.163
July.....	65	67	5.1		7.316
August.....	69	67	4.7		8.178
September.....	56	56	5.1		5.653
Year.....	58.7		5.8		39.632
1914.					
April.....	45		6.9		4.190
May.....	53		6.2		6.853
June.....	58		5.3		5.677
July.....	70		4.4		8.084
August.....	67		4.9		9.268
September.....	56		4.6		4.443
Year.....	58.2		5.4		38.515

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}
Aberdeen, Idaho—Continued.					
1915.					
April.....	51	°F.	5.5	Inches.	4.959
May.....	51		6.2		5.160
June.....	57		6.7		7.903
July.....	65		5.4		8.938
August.....	70		3.9		8.192
September.....	55		5.6		6.032
Year.....	58.2		5.6		41.234
1916.					
April.....	46	°F.	6.8		5.228
May.....	49		7.6		6.471
June.....	58		5.9		8.080
July.....	69		5.1		9.658
August.....	65		4.3		8.335
September.....	57		5.0		6.657
Year.....	57.2		5.8		44.429
1917.					
April.....	40	°F.	7.0		3.244
May.....	49		5.8		5.046
June.....	60		6.8		8.813
July.....	71		4.6		9.780
August.....	65		3.8		8.562
September.....	59		4.3		5.380
Year.....	57.3		5.4		40.825
1918.					
April.....	43	°F.	7.1		5.317
May.....	51		7.2		6.895
June.....	68		4.9		8.279
July.....	68		3.9		7.779
August.....	63		4.4		7.823
September.....	59		3.7		4.808
Year.....	58.7		5.2		40.906
1919.					
April.....	47	°F.	5.2		3.695
May.....	56		6.5		7.308
June.....	63		4.8		7.040
July.....	71		4.8		10.494
August.....	69		4.7		8.838
September.....	59		4.7		4.521
Year.....	60.8		5.1		41.894

Akron, Colo.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}
1908.					
April.....	51	(53.7)	8.7	(0.203)	4.740
May.....	55	(57.0)	8.4	(.246)	7.709
June.....	64	66	8.0	.341	7.639
July.....	70	72	6.0	.438	8.474
August.....	69	70	6.7	.328	7.826
September.....	66	62	7.6	.229	8.550
Year.....	62.5	63.5	7.6	.309	44.936
1909.					
April.....	42	(44)	9.0	.163	4.734
May.....	52	54	10.3	.210	6.825
June.....	64	69	6.8	.367	7.003
July.....	71	74	6.8	.459	9.396
August.....	72	73	5.8	.446	8.538
September.....	60	61	6.7	.310	5.857
Year.....	60.0	62.5	7.6	.332	42.353
1910.					
April.....	50	(50)	(7.5)	(.170)	6.387
May.....	53	(53)	8.1	.232	5.797
June.....	67	65	8.6	.354	8.722
July.....	74	75	6.1	.368	9.763
August.....	62	62	5.0	.408	7.142
September.....	63	65	6.0	.346	5.810
Year.....	62.3	61.7	6.9	.313	43.621
1911.					
April.....	47	(47)	9.1	.179	5.841
May.....	58	58	9.7	.241	7.323
June.....	70	71	7.4	.310	9.753
July.....	70	(70)	7.1	.355	9.774
August.....	69	(69)	8.1	.363	8.944
September.....	64	(65)	7.0	.295	7.183
Year.....	63.0	63.3	8.1	.290	48.818
1912.					
April.....	45		9.9	.326	7.097
May.....	55		8.5		
June.....	63		6.1		6.750
July.....	70		5.4		4.76
August.....	69		5.0		4.23
September.....	52		6.0		4.648
Year.....	59.0		6.8		

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}
Akron, Colo.—Continued.					
1913.					
April.....	47	°F.	8.1		0.171
May.....	57		6.9		.284
June.....	67		8.1		.329
July.....	72		6.1		.350
August.....	75		5.6		.345
September.....	57		6.4		.264
Year.....	62.5		6.9		.290
1914.					
April.....	45	°F.	8.7	(.200)	4.290
May.....	57		7.4		.295
June.....	68		5.8		.374
July.....	72		5.8		.426
August.....	71		6.5		.352
September.....	64		6.9		.269
Year.....	62.8		6.8		.319
1915.					
April.....	50	(54)	7.5	(.200)	4.220
May.....	52		7.7		.267
June.....	60		6.8		.383
July.....	67		6.2		.442
August.....	64		4.3		.438
September.....	60		6.4		.332
Year.....	58.8		6.5		.342
1916.					
April.....	44	(44)	8.1	(.160)	6.208
May.....	55		9.3		.183
June.....	64		7.4		.319
July.....	75		7.3		.359
August.....	69		5.4		.416
September.....	61		6.2		.237
Year.....	61.3		7.3		.279
1917.					
April.....	44		6.8	(.203)	4.081
May.....	50		8.5		.253
June.....	64		7.4		.313
July.....	73		5.5		.386
August.....	67		5.8		.384
September.....	64		6.0		.321
Year.....	60.3		6.7		.307
1918.					
April.....	40		10.4		.183
May.....	57		8.2		.230
June.....	72		6.4		.383
July.....	72		6.3		.419
August.....	70		5.1		.406
September.....	56		5.7		.279
Year.....	61.2		7.0		.313
1919.					
April.....	45		9.8		.191
May.....	55		7.6		.264
June.....	66		7.3		.358
July.....	75		6.4		.440
August.....	73		6.3		.330
September.....	65		6.1		.367
Year.....	63.2		7.2		.325
1920.					
April.....	36		9.9		.198
May.....	55		9.1		.325
June.....	61		6.1		.427
July.....	71		4.4		.476
August.....	67		4.7		.425
September.....	59		4.3		.322
Year.....	58.2		64.2		.364
Amarillo, Tex.					
1907.					
April.....	53	55			0.198
May.....	59	61			.288
June.....	71				.430
July.....	77				.543
August.....	76				.510
September.....	70				.387
Year.....	67.7				.654
1908.					
April.....	50	(54)	(10.10)	(.170)	7.318
May.....	64		8.5		.237
June.....	74		9.2		.435
July.....	73		6.3		.509
August.....	74		5.5		.518
September.....	67		5.5		.387
Year.....	68.0		67.7		.348
1909.					

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E_a .
Amarillo, Tex.—Continued.					
1909.					
April.	54	53	10.2	0.175	8.130
May.	63	(62)	8.9	.217	10.020
June.	73	(72)	8.6	.427	10.337
July.	78	(79)	6.2	.524	9.964
August.	78	75	5.8	.456	9.658
September.	69	68	6.5	.315	8.421
Year.	69.2	68.2	7.7	.352	50.230
1910.					
April.	56	57	9.2	.175	8.494
May.	60	62	9.4	.295	8.032
June.	75	70	9.9	.356	12.011
July.	78	76	7.8	.448	13.167
August.	75	70	7.2	.523	8.806
September.	73	70	7.5	.358	9.092
Year.	69.5	68.5	8.5	.359	58.002
1911.					
April.	55	53	10.1	.224	7.360
May.	66	64	11.2	.359	10.100
June.	76	72	8.5	.437	11.482
July.	74	76	6.6	.532	7.4725
August.	74	74	6.3	.433	8.895
September.	73	71	6.5	.430	7.268
Year.	69.5	68.3	8.2	.402	53.077
1912.					
April.	55	(52)	10.2	.193	7.050
May.	66	63	8.8	.231	9.895
June.	69	70	7.9	.345	8.986
July.	78	76	8.3	.436	10.947
August.	75	75	7.6	.468	9.490
September.	62	66	7.8	.354	6.493
Year.	67.5	67.0	8.4	.338	52.861
1913.					
April.	55	54	8.2	.196	7.736
May.	68	65	8.0	.313	9.812
June.	71	68	8.3	.486	7.045
July.	80	72	9.0	.452	12.734
August.	80	72	7.0	.408	10.453
September.	63	66	6.6	.377	5.994
Year.	69.5	66.2	7.8	.372	53.794
1914.					
April.	55	55	11.4	.236	6.695
May.	63	64	9.9	.391	6.739
June.	77	73	10.1	.508	10.124
July.	77	(73)	5.9	.529	8.747
August.	74	73	6.6	.522	8.927
September.	71	66	8.0	.412	8.041
Year.	69.5	67.0	8.6	.433	49.273
1915.					
April.	56	58	8.6	.293	4.584
May.	60	64	8.4	.314	6.920
June.	73	72	8.4	.410	8.533
July.	75	74	8.2	.527	9.310
August.	70	76	4.9	.504	7.290
September.	68	70	6.8	.406	5.984
Year.	67.0	69.0	7.0	.400	42.930
1916.					
April.	52	54	9.6	.198	5.955
May.	66	64	9.7	.256	10.290
June.	73	68	9.3	.389	10.661
July.	79	73	7.0	.498	11.656
August.	76	71	8.0	.454	10.206
September.	67	65	8.2	.383	7.065
Year.	73.8	65.8	8.6	.348	50.420
1917.					
April.	54		10.7	.168	7.681
May.	57		9.2	.233	7.023
June.	74		9.6	.277	12.475
July.	79		9.2	.429	13.430
August.	73		7.0	.495	8.571
September.	68		6.1	.495	5.961
Year.	67.5		8.6	.350	46.170
1918.					
April.	51		10.4	.163	6.991
May.	68		12.3	.270	11.014
June.	77		7.8	.392	10.128
July.	78		8.3	.441	10.736
August.	77		8.1	.422	10.330
September.	64		8.2	.307	7.376
Year.	69.2		9.2	.332	50.584
1919.					
April.	54		8.7	.256	4.652
May.	61		5.8	.301	5.023
June.	69		5.7	.458	7.086
July.	76		7.9	.502	9.470
August.	77		5.7	.500	8.419
September.	70		7.1	.428	6.137
Year.	67.8		6.8	.422	40.790

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E_a .
Archer, Wyo.					
1913.					
April.	54	53	7.9	0.309	7.104
May.	66	63	6.5	.314	7.756
June.	69	65	5.1	.335	7.557
July.	55	53	5.8	.266	4.496
Year.					
1914.					
April.	42	(43)	9.5	.180	3.574
May.	54	55	7.9	.230	5.708
June.	63	64	7.5	.282	8.317
July.	70	68	5.9	.348	7.987
August.	67	65	6.1	.298	8.580
September.	59	58	5.8	.237	6.774
Year.					
1915.					
April.	48	49	8.3	.231	3.160
May.	48	(49)	8.0	.196	4.701
June.	56	60	8.1	.284	5.557
July.	64	67	6.2	.341	6.538
August.	62	67	4.2	.344	5.352
September.	55	57	6.5	.254	4.955
Year.					
1916.					
April.	41		8.3	.148	4.529
May.	50		10.1	.187	6.158
June.	60		6.7	.271	7.573
July.	71		5.4	.308	9.061
August.	65		5.1	.359	5.945
September.	56		6.5	.238	6.347
Year.					
1917.					
April.	38		10.4	.161	3.765
May.	44		7.9	.209	3.431
June.	60		7.5	.249	7.286
July.	69		5.5	.343	8.317
August.	64		5.7	.296	6.988
September.	60		5.9	.249	5.560
Year.					
1918.					
April.	35		9.9	.158	3.683
May.	52		8.8	.187	6.267
June.	65		5.8	.340	6.842
July.	66		4.6	.376	6.077
August.	66		4.9	.337	6.909
September.	53		5.5	.267	3.712
Year.					
1919.					
April.	56.2		6.6	.221	33.520
May.					
June.					
July.					
August.					
September.					
Year.					
1920.					
April.	43		7.9	.222	3.877
May.	53		5.3	.235	7.875
June.	64		5.5	.261	8.490
July.	70		5.2	.373	9.260
August.	68		5.1	.290	8.291
September.	60		4.5	.306	4.877
Year.					
1921.					
April.	59.7		5.6	.280	42.660
May.					
June.					
July.					
August.					
September.					
Year.					
Ardmore, S. Dak.					
1913.					
April.	48	(48)	6.8	(0.201)	5.697
May.	55	55	5.9	.266	5.885
June.	68	67	4.7	.420	7.487
July.	72	70	6.3	.370	9.111
August.	76	73	5.1	.395	9.516
September.	61	61	6.5	.291	6.479
Year.					
1914.					
April.	63.2	64.0	5.9	.324	44.135
May.					
June.					
July.					
August.					
September.					
Year.					
1915.					
April.	45	(48)	8.2	.260	2.596
May.	56	60	7.7	.286	0.045
June.	66	71	7.1	.350	8.294
July.	77	(78)	5.6	.375	9.861
August.	70	68	5.6	.328	8.160
September.	64	64	6.1	.265	6.821
Year.					

MONTHLY WEATHER REVIEW.

OCTOBER, 1921

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E _o .
Ardmore, S. Dak.—Continued.					
1915.					
April.	52	(55)	6.1	(0.201)	3.328
May.	52	55	6.4	.270	4.381
June.	59	67	6.5	.356	5.764
July.	66	71	5.0	.430	6.082
August.	67	74	3.3	.416	5.238
September.	59	63	4.6	.416	4.115
Year.	59.2	64.2	5.3	.330	28.908
1916.					
April.	44	(46)	6.6	.245	3.853
May.	52	55	8.1	.285	5.457
June.	60	(64)	5.6	.398	6.690
July.	74	(76)	4.2	.475	8.821
August.	68	64	4.3	.416	6.993
September.	59	(60)	5.3	.285	7.056
Year.	60.0	60.8	5.7	.351	38.870
1917.					
April.	41		7.2	.186	3.592
May.	49		6.0	.266	4.471
June.	62		6.1	.314	7.816
July.	74		3.9	.375	9.702
August.	68		3.2	.340	7.871
September.	61		3.0	.296	5.809
Year.	59.2		4.9	.296	39.261
1918.					
April.	39		5.4	.171	3.166
May.	54		6.0	.239	5.747
June.	68		4.1	.341	5.983
July.	70		4.1	.463	6.969
August.	70		4.9	.401	7.903
September.	55		4.6	.288	4.705
Year.	59.3		4.8	.317	34.533
1919.					
April.	43		7.1	.196	3.997
May.	55		6.2	.266	6.257
June.	68		4.6	.408	6.457
July.	75		4.4	.448	9.288
August.	72		3.3	.357	8.687
September.	63		2.3	.261	5.958
Year.	62.7		4.6	.323	40.624
1920.					
April.	35		6.5	.141	2.830
May.	54		7.1	.276	4.544
June.	63		4.4	.392	5.043
July.	71		3.7	.435	7.098
August.	69		4.1	.360	7.575
September.	61		4.3	.299	5.992
Year.	59.0		5.0	.316	33.082
Biggs, Calif.					
1913.					
April.	59				4.223
May.	68				6.510
June.	72				9.078
July.	80		5.3		11.142
August.	81		4.2		9.317
September.	75		4.0		8.208
Year.	72.5				48.508
1914.					
April.	59		3.8		4.485
May.	68		3.8		5.940
June.	71		5.5		7.244
July.	78		4.3		8.058
August.	76		3.4		6.784
September.	69		4.7		5.654
Year.	70.0		4.2		38.165
1915.					
April.	59		5.2		3.515
May.	64		5.1		5.396
June.	74		4.4		9.145
July.	79		3.0		9.312
August.	78		2.2		8.073
September.	70		3.1		5.749
Year.	70.7		3.7		41.190
1916.					
April.	61		4.6	0.353	4.930
May.	63		5.0	.329	7.201
June.	72		4.3	.408	8.981
July.	78		3.0	.479	9.905
August.	76		3.3	.514	8.392
September.	72		2.9	.422	5.921
Year.	70.3		4.0	.418	45.330

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E _o .
Bigg, Calif.—Continued.					
1917.					
April.	58				0.311
May.	63				4.4
June.	75				3.8
July.	83				2.4
August.	77				2.3
September.	72				3.5
Year.	71.3				3.6
1918.					
April.	58				4.2
May.	63				3.9
June.	80				2.1
July.	77				3.1
August.	76				2.2
September.	69				1.7
Year.	70.5				2.9
1919.					
April.	60				3.2
May.	68				3.4
June.	73				3.8
July.	79				3.1
August.	77				5.527
September.	71				2.8
Year.	71.3				3.1
Big Springs, Tex.					
1915.					
April.					
May.					
June.	82		77		8.0
July.	81		79		7.2
August.	76		78		4.5
September.	74		73		5.8
Year.					
1916.					
April.	61		59		8.2
May.	74		71		8.1
June.	83		78		8.8
July.	82		78		4.9
August.	79		74		6.0
September.	72		67		5.8
Year.	75.2		71		7.0
1917.					
April.	63				9.7
May.	68				8.7
June.	81				8.6
July.	84				8.0
August.	84				6.7
September.	75				5.6
Year.	75.8				7.9
1918.					
April.	63				8.8
May.	74				9.3
June.	81				5.1
July.	85				5.9
August.	94				6.0
September.	70				5.8
Year.	76.2				6.8
1919.					
April.	63				331
May.	70				403
June.	73				556
July.	79				599
August.	81				577
September.	73				565
Year.	73.2				5.1
1920.					
April.	60				7.0
May.	69				5.4
June.	75				5.4
July.	83				4.4
August.	75				5.0
September.	73				3.7
Year.	72.5				5.0
Burns, Oreg.					
1914.					
April.	63				196
May.	74				384
June.	81				512
July.	85				452
August.	94				441
September.	70				350
Year.	76.2				389
1919.					
April.	63				331
May.	70				403
June.	73				556
July.	79				599
August.	81				577
September.	73				565
Year.	73.2				5.1
1920.					
April.	60				7.0
May.	69				5.4
June.	75				5.4
July.	83				4.4
August.	75				542
September.	73				3.7
Year.	72.5				5.0
1914.					
April.	45				4.6
May.	54				4.8
June.	56				4.3
July.	67				4.0
August.	66				3.8
September.	53				4.9
Year.	56.8				4.4
1914.					
April.	45				4.6
May.	54				4.8
June.	56				4.3
July.	67				4.0
August.	66				3.8
September.	53				4.9
Year.	56.8				4.4

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_o.$
Burns, Oreg.—Continued.					
1915.					
April.	48		4.7		4.352
May.	49		5.6		4.971
June.	55		5.1		7.714
July.	62		4.0		8.820
August.	69		3.4		9.036
September.	52		4.1		5.871
Year.	55.8		4.5		40.764
1916.					
April.	45		5.2		4.632
May.	45		6.7		6.269
June.	53		5.0		6.905
July.	59		4.5		8.225
August.	64		3.5		7.393
September.	54		3.6		5.837
Year.	53.3		4.8		39.261
1917.					
April.	40		5.7		2.919
May.	48		6.0		5.309
June.	56		5.2		7.895
July.	69		3.8		10.190
August.	57		3.6		5.457
September.	47		2.8		3.847
Year.	52.8		4.5		35.417
1918.					
April.	42		5.7		5.104
May.	48		6.3		7.186
June.	65		4.4		8.611
July.	65		4.3		8.657
August.	59		3.1		7.257
September.	57		2.3		4.674
Year.	56.0		4.4		41.489
1919.					
April.	48		6.7	0.207	4.509
May.	54		7.6	.229	6.838
June.	57		6.5	.184	8.435
July.	67		5.5	.195	9.801
August.	65		4.5	.214	8.210
September.	54		4.6	.218	5.163
Year.	57.5		5.9	.208	42.956

Chillicothe, Tex.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_o.$
Chillicothe, Tex.—Continued.					
1912.					
April.					6.628
May.					9.110
June.	76		5.7	0.480	8.791
July.	85		5.5	.601	10.887
August.	82		5.4	.687	9.285
September.	71		5.1	.533	7.019
Year.	76.2		7.2	.445	55.252
1913.					
April.	62		7.8	.247	7.818
May.	74		7.6	.303	9.758
June.	77		8.0	.558	8.126
July.	85		7.7	.535	11.547
August.	87		5.3	.460	11.606
September.	72		6.7	.467	6.367
Year.	76.2		7.2	.445	55.252
1914.					
April.	61	(60)	8.8		5.863
May.	68	71	6.7		4.842
June.	81	81	6.6		8.346
July.	85	84	4.2		9.209
August.	79	(76)	3.7		7.078
September.	74	77	4.7		5.767
Year.	74.7		5.8		44.105
1915.					
April.	63	(62)	5.4	.357	4.307
May.	68	71	5.8	.445	7.349
June.	78	(75)	5.5	.624	7.307
July.	81	80	5.5	.595	8.531
August.	78	78	4.9	.610	6.929
September.	75	74	5.4	.595	5.247
Year.	73.5		5.4	.543	39.670
1916.					
April.	58	(56)	9.9	.299	5.732
May.	72	70	9.0	.409	8.729
June.	80	77	9.3	.522	10.308
July.	84	82	4.7	.547	10.719
August.	84	80	6.3	.523	10.674
September.	73	74	5.9	.463	7.072
Year.	75.2	73.2	7.5	.460	53.234

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_o.$
Chillicothe, Tex.—Continued.					
1917.					
April.	61		59	11.7	0.232
May.	65		64	9.3	.297
June.	80		73	8.5	.369
July.	85		79	7.3	.530
August.	81		77	6.2	.525
September.	75		75	5.3	.501
Year.	74.5		71.2	8.0	.409
1918.					
April.	59	(58)	9.8	.232	7.455
May.	75	89	11.0	.406	11.184
June.	83	80	5.6	.539	9.663
July.	85	79	6.4	.505	11.822
August.	86	79	6.9	.457	12.984
September.	70	71	7.0	.396	7.497
Year.	76.3		72.7	7.8	.422
1919.					
April.	60		62	8.5	.357
May.	67	70	6.8	.457	5.680
June.	75	(72)	5.2	.599	6.487
July.	81	(78)	5.8	.632	8.383
August.	83	(80)	5.0	.612	9.636
September.	75	(76)	5.9	.559	7.239
Year.	73.5		73.0	6.2	.541
Colby, Kans.					
1914.					
April.	53				
May.	60				
June.	73		75	7.2	0.485
July.	75		78	4.8	.557
August.	75		74	5.9	.485
September.	68		71	6.2	.357
Year.	67.3				
1915.					
April.	54		55	7.4	.309
May.	55		57	7.6	.312
June.	64		68	6.8	.468
July.	71		74	5.5	.562
August.	67		73	3.7	.507
September.	64		67	5.5	.408
Year.	62.5		65.7	6.1	.427
1916.					
April.	46		49	8.1	.195
May.	60		58	8.8	.246
June.	67		65	7.4	.432
July.	79		73	8.1	.466
August.	75		69	6.8	.442
September.	64		59	6.7	.311
Year.	65.2		62.7	7.6	.349
1917.					
April.	46			9.3	.194
May.	54			8.8	.257
June.	69			8.2	.336
July.	77			6.3	.425
August.	70			5.6	.456
September.	66			5.5	.405
Year.	63.7			7.3	.346
1918.					
April.	44			10.3	.185
May.	62			10.0	.289
June.	75			6.2	.408
July.	75			6.8	.469
August.	77			7.0	.433
September.	59			6.4	.295
Year.	65.3			7.8	.346
1919.					
April.	48			9.0	.241
May.	57			7.1	.340
June.	68			5.5	.504
July.	76			5.9	.518
August.	75			4.7	.446
September.	69			5.0	.416
Year.	65.5			6.3	.411
1920.					
April.	43			9.5	.202
May.	58			8.0	.348
June.	68			6.4	.481
July.	74			3.8	.511
August.	69			3.4	.511
September.	67				
Year.	63.2				

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_0.$
Crowley, La.					
1910.					
April.....	°F. 66	°F. 70	M. p. h. 4.5		Inches. 5.656
May.....	74	77	3.7		5.862
June.....	78	82	2.9		5.772
July.....	81	(84)	2.3		5.544
August.....	82	89	1.8		5.394
September.....	79	81	1.7		4.580
Year.....	76.7	80	2.8		32.808
1911.					
April.....	71	—	5.0		5.824
May.....	74	—	2.5		5.310
June.....	82	—	2.3		6.887
July.....	80	—	2.2		5.552
August.....	81	—	2.0		5.417
September.....	82	—	1.5		4.139
Year.....	78.3	—	2.6		33.129
1912.					
April.....	70	—	4.1		4.030
May.....	75	—	2.8		5.694
June.....	77	—	4.0		5.925
July.....	82	—	1.8		5.080
August.....	81	—	2.1		5.750
September.....	80	—	2.4		4.170
Year.....	77.5	—	2.9		30.640
1913.					
April.....	65	—	4.2		5.085
May.....	73	—	3.0		5.973
June.....	78	—	2.9		5.716
July.....	82	—	2.1		5.424
August.....	82	—	1.4		5.344
September.....	76	—	2.1		3.777
Year.....	76	—	2.6		31.299
1914.					
April.....	68	71	4.0		3.981
May.....	74	—	3.5		5.237
June.....	83	90	2.2		6.835
July.....	83	90	2.2		6.123
August.....	81	87	1.8		4.420
September.....	77	83	2.2		5.145
Year.....	77.7	—	2.6		31.741
1915.					
April.....	67	70	4.3		4.668
May.....	75	80	4.1		5.953
June.....	82	(87)	2.5		5.839
July.....	82	88	2.4		6.049
August.....	80	85	3.4		5.972
September.....	79	82	2.4		4.876
Year.....	77.5	82	3.2		33.917
1916.					
April.....	65	71	3.9		4.755
May.....	75	80	3.1		5.784
June.....	80	86	2.9		6.304
July.....	81	87	2.0		5.733
August.....	81	87	1.5		5.208
September.....	76	80	1.6		5.092
Year.....	76.3	82	2.5		32.876
1917.					
April.....	66	71	4.7	0.483	4.919
May.....	71	75	4.5	.504	6.533
June.....	79	86	2.5	.709	7.651
July.....	82	88	2.4	.859	6.022
August.....	81	88	1.5	.848	5.647
September.....	76	86	2.0	.680	4.835
Year.....	75.8	81.3	2.9	.680	35.807
1918.					
April.....	66	72	4.0	.531	4.180
May.....	74	81	3.7	.636	6.136
June.....	83	88	2.0	.827	6.695
July.....	82	88	1.2	.790	6.791
August.....	81	88	1.6	.874	5.709
September.....	73	80	1.9	.641	5.276
Year.....	76.5	82.8	2.4	.716	34.787
1919.					
April.....	67	—	3.4	.471	4.827
May.....	73	—	2.7	.617	5.423
June.....	79	—	2.6	.765	4.387
July.....	82	—	1.3	.874	5.245
August.....	83	—	1.6	.916	5.628
September.....	78	—	2.1	.760	4.386
Year.....	77.0	—	2.3	.734	30.596

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_0.$	Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_0.$
Dalhart, Tex.											
1908.						1908.					
April.....	53	(54)	(9.6)			April.....	53	52	11.2	.167	5.920
May.....	61	61	10.1			May.....	59	60	9.8	.216	10.918
June.....	72	(72)	10.8			June.....	72	73	8.7	.310	12.073
July.....	72	73	7.9			July.....	72	73	7.6	.518	9.132
August.....	73	82	7.1			August.....	73	82	7.1	.536	9.888
September.....	66	67	6.5			September.....	66	67	6.5	.402	7.950
Year.....	66.2	68.2	8.7			Year.....	66.2	68.2	8.7	.378	55.930
1909.						1909.					
April.....	50	52	11.2			April.....	50	52	11.2	.167	8.526
May.....	59	59	9.3			May.....	59	59	9.3	.251	9.901
June.....	72	73	8.7			June.....	72	73	8.7	.431	10.890
July.....	77	77	7.6			July.....	77	77	7.6	.465	11.685
August.....	78	76	7.7			August.....	78	76	7.7	.434	10.565
September.....	64	67	7.1			September.....	64	67	7.1	.325	7.835
Year.....	66.3	67.5	8.6			Year.....	66.3	67.5	8.6	.342	59.402
1910.						1910.					
April.....	54	54	9.9			April.....	54	54	9.9	.180	7.562
May.....	59	62	10.8			May.....	59	62	10.8	.321	8.183
June.....	72	70	9.3			June.....	72	70	9.3	.335	12.020
July.....	76	73	7.9			July.....	76	73	7.9	.464	9.707
August.....	75	71	7.1			August.....	75	71	7.1	.441	10.899
September.....	70	69	6.7			September.....	70	70	7.0	.373	8.769
Year.....	67.7	67.3	8.0			Year.....	67.7	67.3	8.0	.329	57.632
1911.						1911.					
April.....	54	54	9.9			April.....	54	54	9.9	.180	7.562
May.....	65	62	10.8			May.....	65	62	10.8	.257	10.237
June.....	78	70	8.8			June.....	78	70	8.8	.372	12.373
July.....	76	73	7.9			July.....	76	73	7.9	.464	9.707
August.....	75	71	7.1			August.....	75	71	7.1	.441	10.899
September.....	72	70	7.0			September.....	72	70	7.0	.373	8.769
Year.....	67.7	67.3	8.0			Year.....	67.7	67.3	8.0	.360	59.210
1912.						1912.					
April.....	51	(52)	10.8			April.....	51	51	7.4	.272	7.687
May.....	64	(63)	9.0			May.....	64	63	6.2	.517	10.063
June.....	68	(67)	7.1			June.....	68	67	3.7	.535	8.475
July.....	77	(76)	7.3			July.....	77	75	11.0	.552	12.697
August.....	74	71	7.0			August.....	74	71	7.0	.453	11.103
September.....	61	(62)	7.4			September.....	61	65	7.5	.432	6.338
Year.....	65.8	65.2	8.1			Year.....	65.8	65.2	8.1	.353	53.910
1913.						1913.					
April.....	53	51	7.4			April.....	53	51	7.4	.272	7.687
May.....	66	63	6.2			May.....	66	63	6.2	.517	10.063
June.....	75	72	3.7			June.....	75	72	3.7	.535	8.714
July.....	75	75	11.0			July.....	75	75	11.0	.552	12.697
August.....	79	77	7.4			August.....	79	77	7.4	.516	10.771
September.....	62	65	7.5			September.....	62	65	7.5	.432	6.338
Year.....	65.8	65.2	8.1			Year.....	65.8	65.2	8.1	.353	53.910
1914.						1914.					
April.....	52	53	10.7			April.....	52	53	10.7	.251	6.535
May.....	61	65	9.0			May.....	61	65	9.0	.380	7.513
June.....	74	74	8.0			June.....	74	74	8.0	.470	10.258
July.....	74	79	4.1			July.....	74	79	4.1	.544	8.837
August.....	73	77	4.7			August.....	73	77	4.7	.463	9.059
September.....	70	71	6.2			September.....	70	71	6.2	.350	8.227
Year.....	69.0	67.2	7.2			Year.....	69.0	67.2	7.2	.471	56.270
1915.						1915.					
April.....	56	(58)	6.8			April.....	56	56	6.8	.219	5.777
May.....	59	61	7.7			May.....	59	61	7.7	.320	8.075
June.....	70	73	6.6			June.....	70	73	6.6	.426	8.740
July.....	74	76	6.4			July.....	74	76	6.4	.612	9.262
August.....	71	76	4.5			August.....	71	76	4.5	.480	7.919
September.....	67	69	5.9			September.....	67	69	5.9	.480	6.853
Year.....	66.2	68.8	7.1			Year.....	66.2	68.8	7.1	.410	50.727
1916.						1916.					
April.....	51	52	9.4			April.....	51	52	9.4	.273	6.597
May.....	64	63	9.8			May.....	64	63	9.8	.352	11.088
June.....	72	72	8.7			June.....	72	72	8.7	.452	10.367
July.....	78	76	6.9			July.....	78	76	6.9	(.513)	11.022
August.....	75	74	7.5			August.....	75	74	7.5	.498	9.567
September.....	67	68	7.5			September.....	67	68	7.5	.353	7.136
Year.....	67.8	67.5	8.3			Year.....	67.8	67.5	8.3	.412	55.807
1917.						1917.					
April.....	52	—	11.0			April.....	52	—	11.0	.192	8.561
May.....	57	—	9.9			May.....	57	—			

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	$w.$	$v.$	$E_o.$
Dakota, Tex.—Continued.					
1918.					
April.	50	51	10.0	0.196	6.371
May	64	59	10.2	.335	10.640
June	75	70	8.5	.526	9.157
July	78	73	7.4	.600	11.229
August	76	67	7.0	.562	10.854
September	63	64	6.9	.328	6.318
Year	67.7	64.0	8.0	.424	54.569
1919.					
April	52		8.9	.259	5.583
May	61		7.5	.354	6.994
June	69		6.2	.457	7.482
July	76		6.0	.552	9.865
August	75		3.8	.511	8.291
September	70		5.4	.431	6.933
Year	67.2		6.3	.432	45.148
1920.					
April	49		9.7	.182	7.000
May	62		7.4	.354	8.050
June	69		6.3	.436	8.737
July	75		4.7	.499	7.377
August	71		6.9	.477	7.622
September	68		6.6	.385	6.954
Year	65.7		6.9	.402	46.240

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	$w.$	$v.$	$E_o.$
Dickinson, N. Dak.—Continued.					
1914.					
April	40	(44)	8.8		3.647
May	52	57	8.6		4.434
June	61	67	7.0		5.514
July	73	75	5.8		7.604
August	63	68	4.8		5.566
September	58	60	7.0		4.344
Year	57.8	61.8	7.0		31.139
1915.					
April	51	(53)	8.3	(0.188)	5.359
May	50	53	8.2	.258	3.628
June	57	63	7.7	.347	5.070
July	61	67	5.6	.443	4.731
August	64	69	3.3	.472	4.642
September	52	55	5.1	.337	3.200
Year	55.8	60.0	6.4	.341	26.628
1916.					
April	39	(39)	7.6	(.188)	3.169
May	50	49	9.4	.247	4.622
June	58	61	7.0	.347	4.412
July	71	77	4.6	.587	5.695
August	65	65	4.6	.405	5.246
September	55	(57)	6.8	(.284)	3.937
Year	56.3	58.0	6.7	.343	27.081
1917.					
April	36		6.0	.212	2.139
May	49		5.5	.215	5.826
June	59		7.2	.319	7.141
July	72		5.8	.411	9.179
August	66		5.1	.334	7.165
September	57		6.3	.279	5.229
Year	56.5		6.0	.295	36.679
1918.					
April	41		9.4	.182	2.852
May	52		7.9	.252	5.759
June	64		6.2	.407	6.430
July	67		5.6	.422	6.701
August	67		6.5	.427	6.641
September	53		5.0	.283	3.979
Year	57.3		6.8	.329	32.362
1919.					
April	44		8.5	(.188)	4.321
May	55		3.5	.363	6.728
June	71		6.6	.405	8.853
July	73		6.7	.348	9.976
August	70		6.4	.324	9.058
September	60		6.9	.280	5.793
Year	62.2		6.4	.319	44.629
1920.					
April	33		7.1	.133	2.855
May	52		7.8	.257	5.441
June	62		5.5	.409	4.919
July	67		4.1	.483	5.852
August	68		4.6	.393	6.942
September	57		4.8	.261	4.033
Year	56.5		5.7	.318	30.042
Edgeley, N. Dak					
1907.					
April	35		3.200		
May	43		4.765		
June	56		6.019		
July	64		5.886		
August	64		6.755		
September	56		4.008		
Year	53.0		30.633		
1908.					
April	45	(48)	(8.2)	(.188)	3.300
May	50	(53)	(7.7)	.237	4.450
June	60	63	8.9	.334	5.598
July	70	72	4.9	.406	7.506
August	64	65	5.9	.314	6.544
September	60	58	7.0	.273	5.377
Year	58.2	59.8	7.1	.292	33.375
1909.					
April	36	(38)	(8.2)	(.188)	3.173
May	51	53	9.4	.251	4.922
June	62	66	7.0	.424	4.924
July	67	71	5.6	.498	5.360
August	68	71	4.9	.477	6.813
September	57	59	5.0	.331	4.326
Year	58.8	59.7	6.7	.360	29.518
1910.					
April	49	(53)	9.2	.189	5.422
May	50	54	8.0	.212	5.187
June	64	67	6.7	.373	7.097
July	69	70	6.1	.376	8.678
August	61	63	5.4	.328	5.065
September	54	56	5.0	.281	4.109
Year	57.8	60.5	6.7	.293	36.158
1911.					
April	39	(43)	8.0	(.188)	5.285
May	52	56	9.6	.247	5.794
June	65	69	7.3	.415	7.028
July	64	66	7.5	.292	9.259
August	60	63	6.4	.361	5.478
September	53	57	8.9	.290	3.597
Year	55.5	59.0	8.0	.299	36.441
1912.					
April	44	(47)	8.4	.188	3.630
May	52	55	9.6	.293	4.671
June	61	65	6.6	.380	5.528
July	65	71	5.6	.453	6.020
August	64	67	7.1	.417	5.922
September	50	53	7.1	.257	3.207
Year	56.0	59.7	7.4	.326	28.098
1913.					
April	46		9.4	4.147	1900.
May	50		8.1	3.978	April
June	63		7.9	6.951	May
July	65		6.4	7.211	June
August	69		5.5	8.882	July
September	56		6.6	4.701	August
Year	58.2		7.3	33.870	September
1907.					
April	46	51			0.104
May	64	65			3.457
June	68	71			3.985
July	69	72			4.783
August	68	67			4.066
September	53	56			2.87
Year					4.274
1908.					
April	51	56			2.75
May	61	65			4.445
June	69	(72)			5.204
July	67	65			7.037
August	65	67			6.405
September	61	63			5.530
Year					
1909.					
April	35	(37)	(9.1)		4.445
May	52	54	9.7		4.449
June	64	69	5.5		4.103
July	67	73	5.7		5.632
August	69	73	5.7		5.856
September	58	61	6.3		4.527
Year	57.5	61.2	6.9	.376	28.047

TABLE 2.—Continued.

Month and year.	θ_a	θ_w	w.	v.	E _o .
Edgeley, N. Dak.—Continued.					
1910.					
April.	47	(49)	11.2	0.208	4.394
May.	51	52	9.0	.212	5.809
June.	67	65	6.9	.394	6.905
July.	71	67	5.8	.394	8.254
August.	64	62	6.7	.368	5.955
September.	55	56	7.2	.340	3.779
Year.	59.2	58.5	7.8	.319	35.096
1911.					
April.	41	(43)	10.9	.180	4.837
May.	56	59	8.9	.303	5.480
June.	68	71	6.4	.454	6.534
July.	67	68	6.9	.374	7.031
August.	62	67	3.5	.438	4.670
September.	54	59	6.3	.336	3.441
Year.	58	61.2	7.1	.348	32.393
1912.					
April.	46	47	7.4	.208	3.689
May.	55	57	5.9	.326	4.598
June.	61	66	4.6	.424	4.989
July.	66	74	3.1	.542	5.688
August.	62	68	2.9	.462	4.242
September.	51	55	1.8	.342	2.744
Year.	56.7	61.2	4.3	.384	25.950
1913.					
April.	47	50	10.3	.213	3.831
May.	52	53	4.6	.263	3.759
June.	66	70	6.6	.463	6.356
July.	66	71	5.0	.462	5.669
August.	69	71	5.9	.488	5.528
September.	57	59	5.2	.349	4.277
Year.	59.5	62.3	6.3	.373	29.220
1914.					
April.	41	(43)	8.8	.201	3.943
May.	55	57	7.0	.300	4.823
June.	62	68	5.4	.460	4.557
July.	71	74	5.0	.578	6.736
August.	63	66	4.9	.452	4.754
September.	59	58	7.5	.365	4.376
Year.	58.5	61.1	6.4	.393	29.189
1915.					
April.	51	(53)	7.3	(.182)	4.330
May.	49	53	8.5	.268	3.792
June.	56	62	5.9	.384	4.487
July.	62	68	4.4	.477	4.689
August.	63	66	4.1	.454	4.833
September.	55	53	6.4	.352	3.942
Year.	56.0	59.2	6.1	.353	26.053
1916.					
April.	39	(41)	9.3	(.182)	2.495
May.	53	50	10.0	.267	4.889
June.	58	58	5.8	.399	3.777
July.	73	73	4.9	.687	5.814
August.	66	63	5.2	.487	5.043
September.	55	51	6.5	.334	3.594
Year.	57.3	55.0	7.0	.392	25.582
1917.					
April.	38		7.0	.188	2.084
May.	51		6.5	.206	5.625
June.	60		7.0	.377	5.889
July.	71		5.5	.494	7.285
August.	65		6.3	.429	7.032
September.	56		6.7	.343	3.707
Year.	56.8		6.5	.340	31.632
1918.					
April.	41		11.0	.156	4.088
May.	53		8.8	.289	4.506
June.	68		6.0	.448	5.733
July.	67		5.4	.453	6.062
August.	67		5.9	.470	5.425
September.	52		4.6	.248	4.427
Year.	57.2		7.0	.343	30.271
1919.					
April.	42		9.2	.206	3.411
May.	55		8.9	.294	5.050
June.	64		7.1	.558	4.974
July.	66		5.4	.587	5.733
August.	64		5.6	.497	6.236
September.	59		6.4	.390	4.693
Year.	58.3		7.1	.422	30.097

TABLE 2.—Continued.

Month and year.	θ_a	θ_w	w.	v.	E _o .
Edgeley, N. Dak.—Continued.					
1920.					
April.	33				
May.	54				
June.	62				
July.	68				
August.	63				
September.	59				
Year.	57.3				
Garden City, Kans.					
1908.					
April.	54	(52)	(12.0)	(0.210)	9.022
May.	64	61	11.6	.313	9.856
June.	73	71	12.6	.479	10.496
July.	76	75	8.5	.513	9.457
August.	77	(77)	8.5	(.500)	9.689
September.	71	67	8.0	.382	7.612
Year.	69.2	67.2	10.2	.400	56.132
1900.					
April.	50	(50)	(12.0)	.195	6.570
May.	60	60	10.9	.255	9.097
June.	72	71	8.5	.434	8.755
July.	78	80	7.1	.615	9.801
August.	80	(80)	6.9	.563	9.878
September.	69	67	7.1	.391	7.482
Year.	68.2	68	8.8	.417	51.563
1910.					
April.	56	56	10.2	.256	7.755
May.	58	62	9.4	.377	6.328
June.	73	71	9.5	.455	9.425
July.	78	76	6.6	.547	10.467
August.	74	74	6.8	.568	7.627
September.	69	69	7.4	.418	6.808
Year.	68.0	68.0	8.3	.437	48.408
1911.					
April.	53	56	11.1	.210	7.100
May.	65	(65)	13.2	.356	9.723
June.	79	(79)	9.7	.362	11.851
July.	77	75	9.2	.518	10.252
August.	76	74	9.1	.477	10.236
September.	73	70	10.3	.413	8.859
Year.	70.5	69.8	10.4	.399	58.021
1912.					
April.	52	(50)	12.1	.217	6.796
May.	65	61	11.6	.314	10.321
June.	68	67	8.5	.440	8.576
July.	78	74	7.9	.523	10.642
August.	76	74	6.4	.511	9.151
September.	63	61	8.4	.362	7.091
Year.	67.0	64.5	9.2	.394	53.077
1913.					
April.	53	55	12.3	.213	2.807
May.	68	64	10.3	.306	8.223
June.	73	69	10.4	.464	9.512
July.	82	74	10.9	.445	14.153
August.	82	74	8.1	.395	12.895
September.	63	65	7.6	.367	6.930
Year.	70.2	66.8	9.9	.365	54.625
1914.					
April.	54				
May.	61				
June.	68				
July.	77				
August.	80				
September.	77				
Year.	70.8				
1915.					
April.	56	58	8.9	.329	5.252
May.	58	62	9.5	.338	7.046
June.	68	71	8.3	.505	7.701
July.	74	74	7.2	.602	9.258
August.	69	75	4.3	.532	5.920
September.	67	71	6.7	.458	6.034
Year.	65.3	68.5	7.5	.457	41.756
1916.					
April.	56	58	8.9	.329	5.252
May.	58	62	9.5	.338	7.046
June.	68	71	8.3	.505	7.701
July.	74	74	7.2	.602	9.258
August.	69	75	4.3	.532	5.920
September.	67	71	6.7	.458	6.034
Year.	67.8	67.3	8.9	.378	57.459
1917.					
April.	49	(49)	9.7	(.210)	6.179
May.	63	63	11.2	.268	9.631
June.	71	72	9.8	.457	10.326
July.	81	77	8.2	.469	13.218
August.	77	76	7.2	.496	10.674
September.	66	67	7.4	.365	7.431
Year.	67.8	67.3	8.9	.378	57.459

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E _a .
Garden City, Kans.—Continued.					
1917.	°F.	°F.	M. p. h.	Inches.	
April.....	50	.....	11.3	0.222	6.564
May.....	56	.....	9.5	.292	7.439
June.....	73	.....	9.7	.376	12.317
July.....	79	.....	7.3	.490	12.441
August.....	74	.....	6.3	.582	9.009
September.....	69	.....	7.2	(.400)	7.053
Year.....	68.8	.....	8.6	.385	54.823
1918.	.....	.....	.....	.....	.....
April.....	47	.....	11.3	.191	5.252
May.....	67	.....	11.6	.309	10.252
June.....	77	.....	7.3	.465	10.297
July.....	78	.....	7.5	.513	10.117
August.....	80	.....	7.5	.448	11.885
September.....	62	.....	7.2	.332	6.328
Year.....	68.5	.....	8.7	.376	54.111
1919.	.....	.....	.....	.....	.....
April.....	51	.....	11.4	.261	5.256
May.....	61	.....	8.8	.360	6.525
June.....	71	.....	9.1	.471	8.620
July.....	79	.....	9.2	.543	11.915
August.....	79	.....	7.0	.498	11.083
September.....	73	.....	8.1	.480	8.094
Year.....	69.0	.....	8.9	.426	51.493
1920.	.....	.....	.....	.....	.....
April.....	48	.....	9.9	.195	6.838
May.....	62	.....	10.4	.398	7.408
June.....	72	.....	10.1	.470	10.632
July.....	77	.....	7.2	.518	11.156
August.....	71	.....	6.2	.503	7.865
September.....	68	.....	6.5	.417	7.314
Year.....	66.3	.....	8.4	.417	51.100

Havre, Mont.

Month and year.	θ_a .	θ_w .	w.	v.	E _a .
1916.					
April.....	44	.....	5.6	(0.159)	3.991
May.....	48	.....	6.8	.235	5.493
June.....	55	.....	5.7	.330	5.010
July.....	69	.....	4.6	.440	6.427
August.....	66	.....	3.7	.364	5.771
September.....	55	.....	5.4	.291	3.866
Year.....	56.7	.....	53	.303	30.558
1917.	.....	.....	.....	.....	.....
April.....	41	.....	5.4	(-159)	2.578
May.....	53	.....	5.4	.222	5.533
June.....	59	.....	5.8	.259	6.091
July.....	71	.....	4.5	.321	9.518
August.....	64	.....	3.8	.332	7.033
September.....	56	.....	3.9	.318	3.885
Year.....	57.3	.....	4.8	.268	34.638
1918.	.....	.....	.....	.....	.....
April.....	41	.....	5.6	.130	4.678
May.....	52	.....	5.7	.164	6.118
June.....	68	.....	5.3	.276	8.399
July.....	68	.....	4.2	.319	7.311
August.....	66	.....	4.8	.340	6.291
September.....	55	.....	3.6	.238	3.685
Year.....	58.3	.....	4.9	.244	38.473
1919.	.....	.....	.....	.....	.....
April.....	46	.....	6.4	.188	4.314
May.....	56	.....	6.1	.269	6.460
June.....	67	.....	4.5	.327	7.659
July.....	72	.....	5.0	.330	9.440
August.....	70	.....	4.5	.344	7.646
September.....	55	.....	5.6	.285	4.461
Year.....	61.0	.....	5.4	.290	39.980
1920.	.....	.....	.....	.....	.....
April.....	35	.....	7.0	.160	2.374
May.....	53	.....	7.3	.230	6.889
June.....	61	.....	5.4	.312	6.795
July.....	71	.....	5.0	.414	8.210
August.....	68	.....	4.7	.322	7.744
September.....	58	.....	5.1	.246	4.973
Year.....	57.7	.....	5.8	.281	36.985

Hays, Kans.

Month and year.	θ_a .	θ_w .	w.	v.	E _a .
1907.					
April.....	45	(44)	.....	0.185	6.520
May.....	57	58	.....	.305	7.199
June.....	71	73	.....	.505	7.261
July.....	77	80	.....	.614	8.612
August.....	76	74	.....	.579	7.846
September.....	68	68	.....	.401	7.210
Year.....	65.7	66.2	.....	.432	44.648

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E _a .
Hays, Kans.—Continued.					
1908.	°F.	°F.	M. p. h.	Inches.	
April.....	54	(53)	.....	.....	(0.220)
May.....	62	64	.....	.....	6.450
June.....	70	74	.....	.....	7.181
July.....	74	79	.....	.....	7.977
August.....	75	77	.....	.....	7.967
September.....	68	69	.....	.....	6.625
Year.....	67.2	69.4	7.8	.451	44.381
1909.	.....	.....	.....	.....	.....
April.....	49	(48)	.....	.....	6.370
May.....	61	61	.....	.....	9.208
June.....	71	74	.....	.....	7.211
July.....	76	81	.....	.....	7.735
August.....	79	78	.....	.....	10.215
September.....	66	68	.....	.....	6.737
Year.....	67.0	68.4	7.8	.466	47.471
1910.	.....	.....	.....	.....	.....
April.....	55	53	.....	.....	8.339
May.....	60	66	.....	.....	4.855
June.....	70	70	.....	.....	7.797
July.....	77	76	.....	.....	9.258
August.....	73	74	.....	.....	7.601
September.....	67	66	.....	.....	5.969
Year.....	66.3	66.5	7.0	.444	43.817
1911.	.....	.....	.....	.....	.....
April.....	53	51	.....	.....	6.677
May.....	65	64	.....	.....	8.284
June.....	69	69	.....	.....	6.417
July.....	81	76	.....	.....	9.987
August.....	78	75	.....	.....	9.178
September.....	65	63	.....	.....	7.022
Year.....	68.5	66.3	8.6	.421	46.965
1912.	.....	.....	.....	.....	.....
April.....	56	50	.....	.....	6.610
May.....	65	63	.....	.....	7.840
June.....	73	70	.....	.....	8.530
July.....	82	74	.....	.....	13.820
August.....	85	74	.....	.....	14.450
September.....	61	64	.....	.....	7.250
Year.....	70.8	65.8	9.6	.412	58.300
1913.	.....	.....	.....	.....	.....
April.....	56	50	.....	.....	5.758
May.....	65	63	.....	.....	5.094
June.....	73	70	.....	.....	5.282
July.....	82	74	.....	.....	5.256
August.....	85	74	.....	.....	9.817
September.....	70	69	.....	.....	7.889
Year.....	68.5	67.8	7.8	.470	47.096
1914.	.....	.....	.....	.....	.....
April.....	51	52	.....	.....	5.758
May.....	60	62	.....	.....	5.094
June.....	75	74	.....	.....	5.282
July.....	82	77	.....	.....	5.256
August.....	77	73	.....	.....	7.889
September.....	70	69	.....	.....	7.889
Year.....	68.5	67.8	7.8	.470	47.096
1915.	.....	.....	.....	.....	.....
April.....	57	55	.....	.....	4.486
May.....	58	62	.....	.....	5.529
June.....	67	72	.....	.....	5.328
July.....	72	76	.....	.....	7.059
August.....	68	75	.....	.....	5.552
September.....	67	69	.....	.....	5.494
Year.....	64.8	68.2	6.6	.480	33.277
1916.	.....	.....	.....	.....	.....
April.....	49	54	.....	.....	4.228
May.....	62	61	.....	.....	7.037
June.....	69	73	.....	.....	7.731
July.....	82	80	.....	.....	12.201
August.....	80	76	.....	.....	11.125
September.....	67	66	.....	.....	3.390
Year.....	68.2	68.8	8.2	.417	50.231
1917.	.....	.....	.....	.....	.....
April.....	51	.....	.....	.....	6.354
May.....	57	.....	.....	.....	6.527
June.....	74	.....	.....	.....	11.089
July.....	81	.....	.....	.....	11.371
August.....	73	.....	.....	.....	8.140
September.....	69	.....	.....	.....	6.488
Year.....	67.5	.....	8.4	.384	50.469
1918.	.....	.....	.....	.....	.....
April.....	46	.....	.....	.....	4.325
May.....	66	.....	.....	.....	7.491
June.....	78	.....	.....	.....	8.036
July.....	78	.....	.....	.....	9.062
August.....	81	.....	.....	.....	11.244
September.....	62	.....	.....	.....	6.511
Year.....	68.5	.....	7.8	.405	47.569

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_o.$
Hays, Kans.—Continued.					
1919.					
April.	50		10.2	0.282	4.065
May.	59		6.5	.386	4.528
June.	71		5.7	.582	5.405
July.	80		7.2	.548	10.272
August.	78		5.8	.502	9.344
September.	72		7.8	.468	7.382
Year.	68.3		7.2	.461	40.996
1920.					
April.	47		11.0	.225	4.783
May.	61		7.3	.434	4.682
June.	72		7.5	.525	8.117
July.	78		5.7	.624	9.646
August.	72		5.5	.550	6.291
September.	68		6.7	.440	6.257
Year.	66.3		7.3	.460	39.776

Hettinger, N. Dak.

1911.					
April.	39	(43)	8.5	(0.200)	5.290
May.	56	(61)	6.1	.255	7.222
June.	70	63	8.8	.377	10.066
July.	65	63	7.4	.274	11.011
August.	63	59	6.9	.423	6.516
September.	55	52	7.3	.329	4.458
Year.	59.0	56.8	7.6	.310	44.653
1912.					
April.	45	(49)	(8.2)	(.200)	3.940
May.	53	(58)	10.1	.289	4.118
June.	62	67	6.8	.345	6.236
July.	66	72	4.3	.450	5.817
August.	65	(65)	5.4	(.424)	5.999
September.	52	(53)	5.8	(.380)	3.487
Year.	57.2	60.7	6.8	.341	29.597
1913.					
April.	46	(50)	8.6	(.200)	3.997
May.	50	57	8.1	.223	4.308
June.	64	68	8.7	.410	7.828
July.	65	64	6.3	.421	7.772
August.	68	66	5.5	.425	7.339
September.					.....
Year.					.....
1914.					
April.	40		8.0	(.200)	3.585
May.	51		9.1	(.271)	5.027
June.	60		7.6	(.400)	5.961
July.	71		5.8	(.460)	8.359
August.	62		4.7	(.424)	5.835
September.	60		6.1	(.330)	3.984
Year.	57.3		6.9	(.348)	32.751
1915.					
April.	51	(55)	8.1	.238	5.173
May.	49	53	8.2	.273	3.743
June.	56	64	6.9	.405	4.185
July.	61	68	5.3	.445	5.061
August.	63	69	3.5	.453	3.906
September.	52	57	4.2	.331	3.367
Year.	55.3	61.0	6.0	.358	28.495
1916.					
April.	40	(44)	7.7	(.200)	3.947
May.	50	54	8.5	.244	4.434
June.	57	61	6.1	.347	4.146
July.	72	76	5.0	.506	6.482
August.	65	67	4.2	.434	5.270
September.	54	56	5.0	.348	3.515
Year.	56.3	59.7	6.1	.356	27.854
1917.					
April.	36		9.5	.186	2.940
May.	49		9.2	(.271)	5.545
June.	61		9.9	(.400)	6.362
July.	73		7.6	(.460)	7.677
August.	66		6.4	.352	6.464
September.	56		8.1	.280	3.618
Year.	56.8		8.4	.325	32.606
1918.					
April.	41		9.2	.233	3.354
May.	53		8.2	.293	6.036
June.	65		5.9	.446	7.701
July.	67		4.4	.422	6.673
August.	67		4.4	.460	6.714
September.	54		4.0	.315	4.407
Year.	55.0		6.0	.363	34.975

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	$E_o.$
Hettinger, N. Dak.—Continued.					
1919.					
April.	43		7.0		0.201
May.	55		5.8		5.886
June.	70		5.7		7.300
July.	74		5.4		5.08
August.	71		5.2		7.201
September.	58		4.7	(.330)	5.101
Year.	61.8		5.6	.382	39.047
1920.					
April.	34		7.1		3.362
May.	53		7.9		5.019
June.	63		6.3		5.189
July.	70		3.7		3.757
August.	70		4.4		4.21
September.	57		4.8		4.691
Year.	57.8		5.7	.365	29.326
Lawton, Okla.					
1916.					
April.	57	(57)	8.6		5.073
May.	70	70	7.2		7.005
June.	77	77	7.1		8.796
July.	82	83	3.6		8.461
August.	83	80	5.3		9.745
September.	72	72	5.8		7.636
Year.	73.5	73.2	6.3		46.716
1917.					
April.	61		10.8	0.315	8.402
May.	64		7.8	.381	7.310
June.	77		7.0	.539	10.240
July.	83		6.2	.607	10.064
August.	90		5.2	.622	8.514
September.	75		4.6	.531	6.495
Year.	73.3		6.9	.499	51.025
1918.					
April.	58		7.9	.276	6.138
May.	74		9.6	.460	8.826
June.	83		4.7	.632	7.999
July.	81		5.8	.563	10.528
August.	89		6.1	.546	12.132
September.	68		5.3	(.577)	6.773
Year.	75.5		6.6	.509	52.396
1919.					
April.	59		6.7	.376	4.756
May.	66		4.9	.502	5.405
June.	74		3.3	.657	5.357
July.	80		4.0	.734	7.183
August.	82		4.6	.687	8.213
September.	75		5.5	.582	6.103
Year.	72.7		4.8	.590	37.017
1920.					
April.	58		9.0	.273	7.048
May.	69		5.5	.575	5.088
June.	76		5.1	.637	7.647
July.	81		3.8	.672	7.984
August.	76		4.1	.670	5.236
September.	74		4.7	.619	5.202
Year.	72.3		5.4	.574	38.295
Mandan, N. Dak.					
1914.					
April.	43	(45)	8.5	(0.182)	4.030
May.	45	57	8.2	.356	5.080
June.	64	68	5.5	.466	5.998
July.	47	77	4.5	.606	7.550
August.	65	68	4.4	.464	5.036
September.	61	61	6.2	.371	5.055
Year.	60.3	62.7	6.2	.408	33.919
1915.					
April.	52	(54)	7.8	(.182)	4.850
May.	51	53	7.3	.253	3.855
June.	59	61	6.6	.374	5.377
July.	63	67	5.2	.442	5.420
August.	65	71	3.4	.449	5.467
September.	55	59	4.8	.329	3.647
Year.	57.5	60.8	5.8	.338	28.616
1916.					
April.	41	(43)	7.3	.176	3.489
May.	53	55	8.3	.227	5.505
June.	59	63	6.1	.357	4.745
July.	75	79	5.3	.605	7.411
August.	67	71	4.1	.419	5.727
September.	56	58	5.6	.291	4.400
Year.	58.5	61.5	6.1	.346	31.277

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	$w.$	$v.$	$E_s.$
Mandan; N. Dak.—Continued.					
April.....	38		6.1	0.186	2.183
May.....	52		5.7	.192	6.437
June.....	62		7.0	.312	7.175
July.....	73		5.5	.442	8.695
August.....	66		5.3	.360	7.021
September.....	57		5.6	.348	4.171
Year.....	58.0		5.9	.307	35.682
1917.					
April.....	*F.	*F.	M. p. h.	Inches.	
May.....	42		9.3	.174	3.793
June.....	53		7.3	.251	5.510
July.....	65		5.6	.409	7.264
August.....	68		5.1	.411	7.226
September.....	53		6.0	.436	7.272
Year.....	58.2		6.4	.321	35.499
1918.					
April.....	42		7.4	.192	3.739
May.....	56		7.0	.233	6.022
June.....	69		6.4	.482	7.258
July.....	74		5.4	.491	9.188
August.....	71		5.6	.430	8.057
September.....	61		6.1	.334	5.347
Year.....	62.3		6.3	.369	39.501
1919.					
April.....	43		6.7	.131	3.155
May.....	56		7.9	.264	5.543
June.....	66		5.7	.383	6.237
July.....	71		4.6	.477	7.157
August.....	71		5.3	.405	8.452
September.....	60		4.4	.335	4.647
Year.....	59.8		5.8	.334	35.251

Moccasin, Mont.

Month and year.	$\theta_a.$	$\theta_w.$	$w.$	$v.$	$E_s.$
1909.					
April.....	35			(0.185)	3.000
May.....	49			.212	4.657
June.....	58	52		.303	5.997
July.....	63	58		.385	7.222
August.....	65	59		.397	7.060
September.....	59			.273	4.871
Year.....	54.8			.292	32.607
1910.					
April.....	49		9.0	.187	5.176
May.....	51		6.8	.242	5.000
June.....	60		6.3	.307	7.208
July.....	68		5.9	.330	8.283
August.....	62		6.0	.287	7.352
September.....	53		6.4	.317	6.450
Year.....	57.2		6.7	.278	40.135
1911.					
April.....	38	(39)	7.8	.203	4.097
May.....	48	44	8.0	.271	5.941
June.....	60	56	6.4	.425	5.128
July.....	62	54	5.9	.378	7.312
August.....	58	(58)	5.9	.373	6.352
September.....	50	(51)	5.3	.265	3.412
Year.....	52.7	50.3	6.6	.319	32.242
1912.					
April.....	43		6.6	.239	2.618
May.....	52		7.6	.256	4.140
June.....	61		5.7	.304	6.394
July.....	61		4.3	(.336)	5.965
August.....	62		6.4	.311	6.231
September.....	48		6.7	.188	3.422
Year.....	54.5		6.2	.272	28.770
1913.					
April.....	43	(44)	8.7	(.185)	3.894
May.....	49	53	6.5	.238	4.229
June.....	65	66	5.3	.381	4.900
July.....	62	65	5.0	.341	6.388
August.....	65	66	5.4	.288	7.354
September.....	55	56	6.5	.225	4.583
Year.....	56.5	58.3	6.2	.276	31.326
1914.					
April.....	42		(8.1)	(.185)	3.208
May.....	51		7.5	.247	4.845
June.....	57		6.4	.332	4.431
July.....	68		5.5	.372	7.450
August.....	62		6.0	.289	7.239
September.....	56		7.2	.230	5.099
Year.....	56.0		6.8	.276	32.272

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	$w.$	$v.$	$E_s.$
Moccasin, Mont.—Continued.					
April.....	1915.	*F.	*F.	M. p. h.	Inches.
May.....	50			7.6	(0.185) 4.697
June.....	49			7.5	.239 4.612
July.....	52			6.6	.282 4.345
August.....	58			5.1	.323 4.800
September.....	66			4.9	.358 6.505
Year.....	49			5.9	.240 3.443
1916.					
April.....	54.0			6.3	.271 28.492
May.....	41	(42)		8.1	(-185) 5.345
June.....	45	48		9.2	.173 5.261
July.....	55	57		7.7	.298 5.617
August.....	65	68		5.6	.382 6.893
September.....	62	63		5.3	.271 7.572
Year.....	52	(53)		6.9	.208 4.841
1917.					
April.....	53.3	55.2		7.1	.246 35.529
May.....	35			7.8	.163 2.466
June.....	46			7.6	.187 5.064
July.....	55			7.4	.240 6.087
August.....	69			5.9	.278 9.577
September.....	63			6.1	.240 9.873
Year.....	56			7.1	.266 4.636
1918.					
April.....	54.0			7.0	.229 37.673
May.....	37			8.9	.161 3.870
June.....	46			6.8	.200 -----
July.....	63			6.0	.311 6.761
August.....	63			4.5	.341 5.773
September.....	61			4.9	.302 5.654
Year.....	53			4.9	.237 3.434
1919.					
April.....	44			8.5	.159 4.685
May.....	52			8.0	.205 6.374
June.....	64			6.9	.278 8.568
July.....	68			6.6	.270 9.907
August.....	67			6.3	.253 8.742
September.....	54			6.7	.251 4.820
Year.....	58.2			7.2	.236 43.186
1920.					
April.....	32			8.8	.156 4.057
May.....	48			8.9	.191 5.361
June.....	57			5.4	.293 5.179
July.....	66			4.5	.365 6.086
August.....	64			4.8	.299 6.580
September.....	56			5.7	.218 4.793
Year.....	53.8			6.3	.254 32.036
Moro, Oreg.					
1911.					
April.....	46	47	9.6	0.158	5.924
May.....	51	53	9.2	.219	6.134
June.....	59	(59)	11.8	.258	9.614
July.....	70	67	9.4	.268	11.568
August.....	66	65	9.2	.287	9.275
September.....	53	55	7.2	.293	4.164
Year.....	57.5	57.7	9.4	.247	46.679
1912.					
April.....	46	48	8.4	.211	4.507
May.....	55	56	7.8	.254	6.751
June.....	62	62	5.9	.296	7.747
July.....	67	65	5.6	.318	7.804
August.....	64	62	5.3	.326	6.724
September.....	56	55	2.8	.249	4.498
Year.....	58.3	58.0	6.0	.276	38.119
1913.					
April.....	47			7.3	4.087
May.....	55			8.3	6.235
June.....	60			6.9	7.363
July.....	68			5.9	7.896
August.....	68			6.3	7.824
September.....	58			3.8	4.823
Year.....	59.3			6.4	38.228
1914.					
April.....	40			6.8	4.015
May.....	56			7.2	7.432
June.....	59			8.8	8.289
July.....	70			8.8	11.428
August.....	69			7.6	9.638
September.....	55			6.0	4.404
Year.....	59.7			7.5	45.206

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}	Inches.
Moro, Oreg.—Continued.						
1915.	*F.	*F.	M. p. h.			
April.....	51		6.7	0.213		5.126
May.....	52		5.4	.308		5.895
June.....	59		8.2	.323		8.453
July.....	65		8.1	.436		9.054
August.....	72		7.6	.418		9.592
September.....	57		7.0	.314		5.300
Year.....	59.3		7.2	.352		43.420
1916.						
April.....	48		6.4	.216		4.797
May.....	50		6.6	.236		5.676
June.....	50		4.7	.305		6.801
July.....	62		4.5	.385		7.983
August.....	68		3.9	.382		7.499
September.....	59		3.6	.304		4.678
Year.....	56.2		5.0	.305		37.334
1917.						
April.....	44		7.8	.251		3.333
May.....	52		9.7	.289		5.763
June.....	58		7.8	.309		7.800
July.....	72		6.1	.342		9.698
August.....	71		6.8	.306		9.227
September.....	61		6.5	.332		4.418
Year.....	59.7		7.4	.305		40.344
1918.						
April.....	48		7.4	.198		5.500
May.....	52		9.6	.217		7.041
June.....	67		7.9	.303		9.482
July.....	69		8.4	.308		10.548
August.....	64		7.3	.319		7.243
September.....	64		4.6	.310		5.462
Year.....	60.7		7.5	.276		45.276
1919.						
April.....	49		6.9	(.212)		4.851
May.....	54		7.1	.231		7.105
June.....	60		7.8	.247		8.568
July.....	70		5.4	.300		10.578
August.....	68		5.0	.311		8.684
September.....	56		4.2	.282		4.167
Year.....	59.5		6.1	.264		43.951

Nephi, Utah.

1908.						
April.....						
May.....						
June.....						
July.....						
August.....						
September.....						
Year.....						
1909.						
April.....	43		4.7	0.203		3.645
May.....	52		4.6	.215		5.990
June.....	68		4.1	.260		8.803
July.....	72		4.1	.308		9.446
August.....	71		3.3	.382		7.036
September.....	59		3.7	.261		5.600
Year.....	60.5		4.1	.271		40.520
1910.						
April.....	49		5.3			
May.....	56		4.6			
June.....	68		5.4			
July.....	73		4.4			
August.....	71		4.4			
September.....	62		3.9			
Year.....	63.2		4.7			50.340
1911.						
April.....	44		4.3	.140		4.936
May.....	54		6.0	.151		8.403
June.....	63		4.9	.234		8.630
July.....	69		3.7	.280		8.703
August.....	70		4.4	.217		10.469
September.....	61		4.6	.211		6.695
Year.....	60.2		4.6	.206		47.885
1912.						
April.....	41		4.3			
May.....	52		5.2			
June.....	65		4.8			
July.....	70		4.3			
August.....	70		3.9			
September.....	54		4.1			
Year.....	58.7		4.4			43.411

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}	Inches.
Nephi, Utah—Continued.						
1913.	*F.	*F.	M. p. h.			
April.....	(46)		(4.6)			5.934
May.....	58		4.6			7.474
June.....	63		4.4			8.313
July.....	70		4.2			9.526
August.....	71		3.5			8.252
September.....	58		3.3			5.250
Year.....	61.0		4.1			44.749
1914.						
April.....	46		3.7			3.235
May.....	57		3.7			6.440
June.....	62		4.0			7.277
July.....	69		3.1			7.409
August.....	72		3.3			9.520
September.....	62		4.4			7.767
Year.....	61.3		3.7			41.848
1915.						
April.....	52		4.2			4.811
May.....	52		4.0			4.735
June.....	60		3.8			8.424
July.....	70		4.0			11.153
August.....	71		3.3			10.644
September.....	58		3.3			6.247
Year.....	60.5		3.8			45.514
1916.						
April.....	48		4.9			5.395
May.....	51		5.0			7.793
June.....	62		4.4			10.021
July.....	71		3.8			9.392
August.....	68		3.7			9.823
September.....	61		3.9			7.428
Year.....	60.2		4.3			48.952
1917.						
April.....	42		3.8			0.167
May.....	48		2.5			3.952
June.....	60		3.0			2.208
July.....	74		2.9			2.688
August.....	69		3.0			9.086
September.....	61		2.8			6.152
Year.....	59.0		3.0			41.807
1918.						
April.....	44		4.1			4.868
May.....	53		4.2			6.700
June.....	71		2.9			8.845
July.....	71		3.0			8.754
August.....	69		2.8			2.771
September.....	62		2.7			5.902
Year.....	61.7		3.3			43.865
1919.						
April.....	49		3.8			5.051
May.....	57		3.7			2.76
June.....	69		4.4			11.365
July.....	77		3.6			11.940
August.....	73		3.5			9.369
September.....	63		3.8			6.613
Year.....	64.7		3.8			51.532
North Platte, Nebr.						
1907.						
April.....	43					
May.....	52					
June.....	68					
July.....	72					
August.....	72					
September.....	61					
Year.....	61.0					
1908.						
April.....	51		9.4			6.447
May.....	56		9.1			6.226
June.....	65		8.1			7.785
July.....	71		6.1			5.552
August.....	72		7.1			4.457
September.....	61		8.7			5.345
Year.....	61.0					
1909.						
April.....	51		9.4			6.001
May.....	56		9.1			6.092
June.....	65		8.1			6.256
July.....	71		7.4			7.513
August.....	70		7.2			5.520
September.....	69		8.7			6.932
Year.....	63.7		8.1			
1910.						
April.....	43		8.5			4.626
May.....	57		9.4			7.352
June.....	67		6.2			6.123
July.....	72		6.9			7.853
August.....	75		6.8			5.599
September.....	63		6.7			6.128
Year.....	62.8		7.4			
1909.						
April.....	43		48			
May.....	57		57			
June.....	67		71			
July.....	71		76			
August.....	75		75			
September.....	63		63			
Year.....	62.8		65.0			

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E _g .
North Platte, Nebr.—Continued.					
1910.					
April.	54	52	10.5	0.174	7.489
May.	54	55	8.3	.304	5.976
June.	68	(88)	10.6	.440	9.901
July.	75	(74)	6.9	.532	9.747
August.	69	(86)	6.8	.480	7.603
September.	64	62	7.6	.384	5.848
Year.	64.0	63.3	8.4	.386	46.564
1911.					
April.	47	(47)	10.1	.202	5.699
May.	60	58	10.5	.316	7.213
June.	76	67	10.1	.452	12.485
July.	72	69	7.8	.524	9.858
August.	70	65	7.8	.554	8.093
September.	68	64	7.6	.441	6.354
Year.	65.2	61.7	9.0	.415	49.702
1912.					
April.	48	(48)	9.5	(.212)	.....
May.	60	58	9.5	.359	.....
June.	66	63	8.0	.407	.....
July.	74	72	7.0	.596	.....
August.	71	71	5.8	.501	.....
September.	58	55	7.0	.358	.....
Year.	62.8	61.2	7.8	.406	.....
1913.					
April.	51	.....	10.7	(.212)	6.662
May.	59	.....	8.3	.366	6.626
June.	70	.....	8.6	.496	9.219
July.	75	.....	7.4	.517	10.386
August.	79	.....	7.3	.561	11.558
September.	63	.....	7.4	.402	7.005
Year.	66.2	.....	8.3	.426	51.456
1914.					
April.	50	(50)	8.3	(.212)	5.641
May.	60	(60)	8.9	.358	6.324
June.	72	72	7.6	.544	8.979
July.	77	75	6.5	.610	10.147
August.	74	69	6.7	.488	9.580
September.	68	(66)	8.0	.379	6.765
Year.	66.5	65.3	7.7	.432	47.436
1915.					
April.	54	55	8.4	.290	6.108
May.	54	56	7.4	.298	5.868
June.	63	68	7.1	.444	6.040
July.	69	73	5.5	.545	6.607
August.	67	72	4.1	.494	5.981
September.	61	64	6.5	.396	4.867
Year.	61.3	64.3	6.5	.411	35.489
1916.					
April.	47	47	7.5	.196	4.552
May.	58	56	8.4	.287	7.015
June.	64	65	7.9	.420	6.983
July.	79	76	8.7	.533	11.028
August.	73	74	6.0	.501	7.703
September.	62	63	6.3	.367	6.282
Year.	63.8	63.5	7.5	.384	43.603
1917.					
April.	44	.....	9.2	.210	4.301
May.	52	.....	8.8	.298	4.886
June.	67	.....	7.5	.426	8.258
July.	77	.....	6.0	.528	10.488
August.	70	.....	5.7	.465	7.676
September.	63	.....	6.6	.422	4.879
Year.	62.2	.....	7.3	.392	40.578
1918.					
April.	43	.....	10.1	.203	4.304
May.	61	.....	9.5	.323	7.365
June.	72	.....	6.7	.487	8.887
July.	74	.....	8.2	.532	8.883
August.	73	.....	5.6	.512	8.048
September.	60	.....	5.8	.298	4.862
Year.	63.8	.....	7.3	.392	44.849
1919.					
April.	46	.....	8.7	.240	4.016
May.	58	.....	7.6	.324	6.069
June.	69	.....	7.9	.512	6.976
July.	76	.....	8.2	.564	9.951
August.	73	.....	4.7	.468	7.384
September.	68	.....	5.2	.398	5.730
Year.	65.0	.....	6.7	.418	40.126
1920.					
April.	40	.....	8.7	.182	.....
May.	58	.....	8.1	.340	.....
June.	68	.....	5.8	.493	.....
July.	74	.....	3.7	.444	.....
August.	70	.....	5.0	.472	.....
September.	65	.....	5.1	.358	.....
Year.	62.5	.....	6.1	.382	.....

TABLE 2.—Continued.

Month and year.	θ_a .	θ_w .	w.	v.	E _g .
Sheridan, Wyo.					
1917.					
April.	40	.....	5.9	0.187	.....
May.	50	.....	6.4	.230	4.909
June.	59	.....	5.2	.306	5.819
July.	73	.....	4.3	.365	9.810
August.	65	.....	4.2	.285	7.850
September.	59	.....	4.4	.290	5.138
Year.	57.7	.....	5.1	.277	.....
1918.					
April.	38	.....	6.8	.191	2.948
May.	52	.....	5.0	.245	4.181
June.	68	.....	3.9	.411	6.368
July.	69	.....	3.4	.419	6.694
August.	68	.....	3.8	.340	7.503
September.	56	.....	3.5	.288	3.873
Year.	58.5	.....	4.4	.316	31.567
1919.					
April.	46	.....	5.9	.184	3.563
May.	57	.....	6.1	.213	6.899
June.	71	.....	6.1	.283	8.976
July.	75	.....	5.3	.314	10.297
August.	72	.....	3.5	.287	8.770
September.	60	.....	2.0	.310	5.158
Year.	63.5	.....	4.8	.265	43.663
1920.					
April.	36	.....	6.1	.185	2.100
May.	52	.....	6.0	.303	4.128
June.	61	.....	4.1	.396	5.255
July.	69	.....	2.8	.443	6.754
August.	68	.....	3.7	.312	7.152
September.	58	.....	3.3	.245	5.083
Year.	57.3	.....	4.3	.314	30.472
Tucumcari, N. Mex.					
1913.					
April.	57	.....	6.7	0.191	7.216
May.	68	.....	7.3	.292	10.345
June.	71	.....	7.2	.410	8.716
July.	79	.....	6.6	.400	11.833
August.	79	.....	5.2	.419	10.138
September.	64	.....	5.5	.332	6.438
Year.	69.7	.....	6.4	.341	54.686
1914.					
April.	56	.....	9.3	.221	7.046
May.	64	.....	7.4	.361	7.286
June.	76	.....	7.1	.470	9.875
July.	76	.....	3.2	.551	8.078
August.	78	.....	3.9	.487	8.962
September.	73	.....	5.0	.395	7.590(?)
Year.	70.2	.....	6.0	.414	49.137
1915.					
April.	58	(54)	6.3	.286	5.554
May.	63	60	7.1	.241	9.912
June.	74	69	7.1	.342	11.239
July.	76	71	6.1	.458	10.023
August.	73	70	4.3	.441	8.406
September.	70	62	5.6	.357	7.369
Year.	69.0	64.3	6.1	.354	52.503
1916.					
April.	55	50	7.6	.188	6.833
May.	67	58	7.8	.187	11.317
June.	77	66	7.6	.302	12.729
July.	80	72	5.5	.390	11.506
August.	78	74	5.5	.471	8.879
September.	69	68	4.9	.351	7.617
Year.	70.7	64.7	6.5	.315	58.901
1917.					
April.	56	.....	8.7	.147	9.604
May.	60	.....	8.2	.216	9.484
June.	76	.....	7.3	.302	13.723
July.	82	.....	6.4	.416	13.410
August.	75	.....	5.4	.450	10.017
September.	70	.....	4.4	.410	7.223
Year.	69.8	.....	6.7	.323	63.461
1918.					
April.	53	.....	8.7	.171	8.038
May.	68	.....	10.0	.205	12.628
June.	79	.....	6.7	.377	12.229
July.	80	.....	6.8	.460	12.048
August.	78	.....	7.0	.418	11.573
September.	67	.....	6.9	.335	8.167
Year.	70.8	.....	7.7	.328	64.683

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}
TUCUMCARI, N. Mex.—Continued.					
1919.					
April.	55		7.7	0.312	5.738
May.	63		6.7	.456	7.784
June.	70		4.7	.543	7.544
July.	75		4.9	.573	9.205
August.	77		2.9	.561	8.555
September.	71		4.6	.487	6.962
Year.	68.5		5.2	.485	45.788
1920.					
April.	51		9.1	.174	8.101
May.	64		6.2	.349	7.732
June.	70		5.4	.450	9.213
July.	76		3.8	.533	9.544
August.	69		3.5	.524	7.330
September.	61		4.1	.488	6.929
Year.	65.2		5.4	.420	48.849

WILLISTON, N. DAK.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}
1909.					
April.	35	(38)	(7.7)	(0.213)	3.000
May.	51	(54)	(7.6)	.360	6.496
June.	61	(84)	7.0	.453	5.173
July.	67	(70)	5.8	.561	6.018
August.	69	72	4.8	.487	7.254
September.	59	61	5.1	.397	4.675
Year.	57.0	59.8	6.3	.409	32.586
1910.					
April.	50	52	8.7	.217	5.340
May.	51	55	8.0	.236	5.764
June.	67	68	7.0	.368	8.171
July.	71	70	5.7	.402	8.994
August.	62	62	5.5	.341	5.802
September.	55	54	4.8	.273	3.910
Year.	59.3	60.2	6.6	.306	37.981
1911.					
April.	42	(45)	8.8	.182	5.790
May.	56	54	8.6	.200	6.087
June.	68	68	6.9	.416	7.145
July.	65	67	6.1	.331	8.717
August.	62	66	5.1	.376	5.624
September.	53	54	6.0	.324	3.742
Year.	57.7	59.0	6.9	.315	37.105
1912.					
April.	45	53	7.2	.200	3.875
May.	54	58	7.9	.282	4.781
June.	66	68	6.1	.436	6.468
July.	65	72	3.8	.460	5.980
August.	64	69	4.6	.427	4.993
September.	50	54	5.1	.268	2.981
Year.	57.3	62.3	5.8	.346	29.078
1913.					
April.	47	46	8.1	.218	4.432
May.	52	55	6.5	.258	5.229
June.	67	71	6.3	.431	7.676
July.	67	70	4.2	.423	7.154
August.	69	70	4.4	.460	6.737
September.	57	57	5.1	.345	4.251
Year.	59.8	61.5	5.8	.356	35.479
1914.					
April.	43	51	6.6	.234	3.866
May.	54	58	7.1	.287	5.603
June.	62	67	4.9	.458	5.022
July.	73	77	3.5	.562	-----
August.	64	68	3.5	.423	-----
September.	58	59	4.2	.303	-----
Year.	59.0	63.3	5.0	.378	-----
1915.					
April.	52	52	7.3	.249	4.986
May.	52	54	7.3	.238	5.073
June.	58	62	6.9	.382	5.954
July.	62	(71)	4.9	.400	5.793
August.	67	70	4.0	.403	5.989
September.	52	54	3.9	.311	2.650
Year.	57.2	60.5	5.7	.336	30.454

TABLE 2.—Continued.

Month and year.	$\theta_a.$	$\theta_w.$	w.	v.	E _{o.}
WILLISTON, N. Dak.—Continued.					
1916.					
April.	40				
May.	51				
June.	59				
July.	72				
August.	64				
September.	54				
Year.	56.7				
1918.					
April.	47				
May.	53				
June.	65				
July.	68				
August.	65				
September.	55				
Year.	58.0				
WOODWARD, Okla.					
1914.					
April.	58				
May.	66				
June.	81				
July.	83				
August.	79				
September.	75				
Year.	73.7				
1915.					
April.	60	(60)			
May.	62	66			
June.	73	(70)			
July.	78	78			
August.	72	77			
September.	(71)	72			
Year.	69.3				
1916.					
April.	54	54			
May.	69	(71)			
June.	73	(70)			
July.	82	(80)			
August.	82	78			
September.	70	69			
Year.	71.7				
1917.					
April.	54				
May.	61				
June.	78				
July.	84				
August.	76				
September.	72				
Year.	70.8				
1918.					
April.	51				
May.	71				
June.	81				
July.	81				
August.	84				
September.	66				
Year.	72.3				
1919.					
April.	57				
May.	62				
June.	71				
July.	80				
August.	83				
September.	74				
Year.	71.2				
1920.					
April.	53				
May.	66				
June.	77				
July.	80				
August.	74				
September.	72				
Year.	70.3				